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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,010	03/25/2002	Byung-Ik Ahn	38779/245435	5295

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EXAMINER

KIM, WESLEY LEO

ART UNIT PAPER NUMBER

2683

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,010

Applicant(s)

AHN ET AL.

Examiner

Wesley L Kim

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/6/02, 5/19/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: S210 (Par.92;10), S222 (Par.94;3), S224 (Par.94;3), S238 (Par.94;4). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (U.S. Patent No. 6714799 B1).

Regarding claim 1, Park et al discloses a subscriber identity module (SIM) cardholder for installing or uninstalling a SIM card of a global system for mobile

communications (GSM) service subscriber (Fig.3;62, Col.4;57-61 a subscriber can insert a card into the CDMA terminal therefore, it is inherent that a cardholder of some sort exists), wherein when a SIM card of a GSM service subscriber is installed in the SIM cardholder in the CDMA service area (Col.6;19-24), specific data are transmitted using a CDMA message (Fig.8) in the case of authenticating the GSM service subscriber using information on the GSM service subscriber stored in the SIM card (Col.6;40-45), and when the authentication of the GSM service subscriber is normally completed, the CDMA terminal is used for the GSM service subscriber as a roaming service terminal in the CDMA service area (Col.8;5-12).

Regarding claims 2 and 6, Park et al discloses all the limitations as discloses in claim 1 in addition to a wireless signal transmitter for transmitting and receiving wireless signals (Fig.3;22); a mobile station modem (MSM) connected to the wireless signal transmitter, for controlling the CDMA terminal (Fig.3;26); a SIM interface (Fig.3;60) for communicating data between the MSM and the SIM cardholder; a speaker for outputting speech data output by the MSM to a CDMA terminal user in a speech format (Fig.3;36); a microphone for converting the speech input by the CDMA terminal user into speech data, and outputting them to the MSM (Fig.3;36); a liquid crystal display (LCD) connected to the MSM, for displaying information to the CDMA terminal user (Fig.3;38 to one of ordinary skill in the art it is inherent that the display of a CDMA terminal is a liquid crystal display); a key input unit for receiving a key input of the CDMA

terminal user, and transmitting it to the MSM; and a memory connected to the MSM, for storing various data.

*Further regarding claim 6, Park et al discloses a mobile station modem (MSM) connected to the wireless signal transmitter, for controlling the CDMA terminal (Fig.3;26).*

Regarding claim 3, Park et al discloses all the limitations as disclosed in claim 1 in addition to a modem (Fig.3;44)for demodulating signals output by the wireless signal transmitter according to the CDMA protocol, modulating the signals according to the CDMA protocol, and outputting them to the wireless signal transmitter (Col.4;24-28); a de-interleaver and decoder for de-interleaving and decoding the signals output by the modem (Col.4;30-34); a speech signal processor for performing speech processing on the signals output by the de-interleaver and decoder, outputting them to the speaker as digital speech data, performing signal processing on the speech data input by the microphone, and outputting them (Col.4;37-47); an interleaver and encoder for interleaving and encoding the signals output by the speech signal processor (Fig.3;50); and a controller for controlling the modem, the de-interleaver and decoder, the speech signal processor, the interleaver and encoder, the LCD, the key input unit, and the memory (Fig.3;42).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (U.S. Patent No. 6714799 B1) in view of Grilli et al (U.S Patent No. 6438117 B1).

Regarding claim 4, Park et al discloses all the limitations as disclosed in claim 2 however, he does not expressly disclose any of the other limitations of claim 4. On the other hand, Grilli et al does disclose a duplexer (Fig.2B;70) for transmitting and receiving wireless signals through an antenna, and assigning a path of the transmitted and received signals; a wireless receiver (Fig.2B;72) for performing signal processing on the wireless signals transmitted by the duplexer, and outputting them to the MSM (Fig.2B;59 inspection of fig.2B obviously depicts signals processed in 74 sent to the MSM); and a wireless transmitter for performing signal processing on the wireless signals output by the MSM, and outputting them to the duplexer (Fig.2B;59 inspection of fig.2B obviously depicts signals processed in 66 sent to the duplexer). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a duplexer in a CDMA terminal which provides roaming service to a GSM service subscriber in a CDMA service area because it allows isolation of the receiver from the transmitter while permitting them to share a common antenna therefore, the terminal won't be weighed down by the implementation of additional antennas.

5. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (U.S. Patent No. 6714799 B1) in view of Shin Y. S. (U.S. Pub No. KR2002021542A)

Regarding claim 5, Park et al discloses the cardholder can install or uninstall the SIM card of the GSM service subscriber (Fig.3;62, Col.4;57-61 a subscriber can insert a card into the CDMA terminal therefore, it is obvious that a cardholder of some sort exists), and the card interface (Fig.3;60) can detect whether the SIM card is installed in the cardholder, and when the card interface detects that the SIM card of the GSM service subscriber is installed in the cardholder in the CDMA service area (Col.6;19-24), specific data are transmitted using a CDMA message in the case of authenticating the GSM service subscriber using information of the GSM service subscriber stored in the SIM card (Col.6;40-45), and when the authentication of the GSM service subscriber is normally completed, the CDMA terminal operates as a roaming terminal for the GSM service subscriber in the CDMA service area (Col.8;5-12).

However, he does not expressly disclose a cardholder for installing and uninstalling a user identity module (UIM) of a CDMA service subscriber; and a card interface for detecting whether a UIM card is installed in the cardholder, wherein when the card interface detects that the UIM card of the CDMA service subscriber is installed in the cardholder in the CDMA service area, the CDMA service subscriber can use the CDMA service. On the other hand, Shin Y.S. does disclose a R-UIM (Removable-User Identity Module) of a CDMA system so as to efficiently perform global roaming between areas and countries having CDMA system networks (Abstract). To one of ordinary skill in the art at the time of the invention, it would have been obvious to improve upon Park et als' CDMA

terminal with SIM card in a CDMA service area so that it is interchangeable with Shin Y.S.'s R-UIM card in a CDMA terminal because it would allow CDMA subscribers along with GSM subscribers to use their mobile terminals in a CDMA service area. After the combination, it is now obvious that there exists a card interface (Fig.3;60, Park et al) for detecting the presence of a R-UIM card (Fig.3;62, Col.4;57-61, a subscriber can insert or remove a SIM/R-UIM card into the CDMA terminal therefore, it is obvious that a cardholder of some sort exists, Park et al). Finally, when the card interface detects that the R-UIM card of the CDMA service subscriber is installed in the cardholder in the CDMA service area, the CDMA service subscriber can use the CDMA service (Abstract;12-15, Shin Y.S.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L Kim whose telephone number is 703-605-4319. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WLK



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